

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: J. Matousek Attorney Docket No.: MSFT122014
Application No.: 10/781,983 Art Unit: 2161 / Confirmation No: 5394
Filed: February 18, 2004 Examiner: C. Nguyen
Title: SYSTEM AND METHOD FOR FILTERING RECURRENCE EVENTS

RESPONSE AFTER NON-FINAL REJECTION

Seattle, Washington 98101

March 12, 2008

TO THE COMMISSIONER FOR PATENTS:

Applicant respectfully requests re-examination of the above-identified patent application. Claims 1-24 are pending in the present application.

In the December 12, 2007, Office Action (hereinafter "Office Action"), Claims 1-10 and 13-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,272,074, issued to Winner et al. (hereinafter "Winner"), in view of U.S. Patent No. 6,594,637, issued to Furukawa et al. (hereinafter "Furukawa"). Further, Claims 11-12 and 23-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Winner in view of Furukawa and further in view of U.S. Patent No. 6,369,840, issued to Barnett et al. (hereinafter "Barnett"). Applicant respectfully disagrees and submits that Claims 1-24 are not obvious over Winner, Furukawa, and Barnett, taken alone or in combination, because the prior arts fail to teach or suggest certain elements of both the independent and dependent claims, which are discussed in detail later in this response.

Pursuant to 37 C.F.R. § 1.111, and for the reasons set forth below, applicant respectfully requests reconsideration and allowance of the pending claims. Prior to presenting the reasons why applicant believes that all the pending claims are in condition for allowance, a brief summary of the present invention, as well as the cited references, are presented. However, it

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should be appreciated that the following summaries are presented solely to assist the Examiner in recognizing the differences between the pending claims and the cited references and should not be construed as limiting upon the present invention.

Summary of the Present Invention

Aspects of the present invention enable the storage of recurrence events in a single database record while allowing filtering of the recurrence events. In this regard, the present invention enables filtering of recurrence events by obtaining a data set of exceptions, identifying exceptions that are not contained in the filtered data set, and creating a new data set of filtered items. Instead of generating output for transmission to the user based on a filtered data set, the new data set of filtered items is used to generate the output that will be displayed to the user. This enables software such as calendar software to minimize the amount of data stored in a database that is ultimately transmitted between remote computing devices. In one embodiment, the present invention supports filtering of recurrence events and exceptions to recurrence events that are managed by calendar software. The calendar software is web-based and includes a database located on a server computing device that receives requests for calendar items and other filtered data from a client computing device associated with a user.

Summary of Winner

Winner is purportedly directed to providing an electronic calendaring and scheduling capability that minimizes storage requirements. Users are allowed to define recurring calendar items based on an expression that is stored in a single database record. As a result, a user may define an infinite number of recurrence events from the original event definition. Moreover, by storing recurrence events in single database records, the storage requirements needed to store an event in a distributed computer environment are minimized. The Winner system utilizes a recurrence expression for the purpose of storing recurrence events in the database. These

recurrence expressions may include one or more anti-event expressions that are used to generate one or more exception dates that cancel at least one of the recurrence dates. These anti-event expressions are stored in the same database record as the original recurrence event.

Summary of Furukawa

Furukawa is purportedly directed to automatically generating, for a plurality of users, a schedule of a corresponding date when a regularly and periodically occurring schedule is inputted, along with a period and condition of occurrence for the plurality of users. A common routine schedule number is correlated to the generated schedule, and a common sum schedule number is associated to each date. The schedule thus registered can be corrected/deleted individually and in a group.

Summary of Barnett

Barnett is purportedly directed to an online calendaring and purchasing system based on user selected events. The user may select categories of interest and then select individual events within those categories. A user-specific calendar is provided that displays events selected by the user. Moreover, calendars may also be shared among a number of selected users. In this regard, online purchasing and related actions can be associated with each event.

Claim Rejections Under 35 U.S.C. §103(a): Winner in view of Furukawa

As noted above, the Office Action rejected Claims 1-10 and 13-22 under 35 U.S.C. § 103(a) as being unpatentable over Winner in view of Furukawa. Applicant respectfully disagrees.

Claims 1 and 13

For purposes of this discussion, independent Claims 1 and 13 of the present application will be discussed together because the same distinguishing elements over Winner and Furukawa are recited in each of these claims. Claim 1 recites the following:

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1. A computer-implemented method of filtering recurrence events comprising:

in response to receiving a request to display a recurrence event in a computing device, determining if a filter for identifying items that match a search criteria defined by the user is required to satisfy said request, wherein said recurrence event is represented in a database in a single database record;

if a filter is required to satisfy said request:

creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items and exceptions;

structuring said data set of filtered items and exceptions for display on the computing device, wherein structuring said data set includes expanding said recurrence event from the single database record;

conversely, if a filter is not required to satisfy said request:

creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items, recurrence events, and exceptions; and

structuring said data set of filtered items, recurrence events, and exceptions for display on the computing device, wherein structuring said data set includes expanding said recurrence event from the single database record.

Similarly, Claim 13 recites the following:

13. A computer-readable medium bearing computer-executable instructions which, when executed, carry out a computer-implemented method of filtering recurrence events comprising:

in response to receiving a request to display a recurrence event in a computing device, determining if a filter for identifying items that match a search criteria defined by the user is required to satisfy said request, wherein said recurrence event is represented in a database in a single database record;

if a filter is required to satisfy said request:

creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items and exceptions;

structuring said data set of filtered items and exceptions for display on the computing device, wherein structuring said data set includes expanding said recurrence event from the single database record;

conversely, if a filter is not required to satisfy said request:

creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items, recurrence events, and exceptions; and

structuring said data set of filtered items, recurrence events, and exceptions for display on the computing device, wherein structuring said data set includes expanding said recurrence event from the single database record.

The Office Action asserts that Winner teaches "determining if a filter for identifying items that match a search criteria defined by the user is required to satisfy said request" and cites Winner at Col. 4, lines 40-44, in support of this proposition. The section of Winner referenced in the Office Action describes a process for creating a calendar event in a distributed network environment. The calendar event is created automatically depending on when the scheduled attendees are available. In this regard, data is obtained in order to determine when an event may be created at a time in which the multiple attendees do not have another competing event. By contrast, Claims 1 and 13 include "determining if a filter for identifying items that match a search criteria defined by the user is required to satisfy said request" Applicant respectfully submits that creating a calendar event in a distributed network environment as purportedly taught by Winner is not equivalent to determining if a filter for identifying items that match a search criteria defined by the user is associated with a recurrence event. The filter for identifying events requested by the user may be used in conjunction with the system that allows users to create recurrence events and exceptions to recurrence events in calendar software. Accordingly, Winner fails to teach "determining if a filter for identifying items that match a search criteria defined by the user is required to satisfy said request."

Applicant agrees with the Office Action's remarks that Winner does not disclose determining if a filter is required to satisfy said request. Accordingly, Winner fails to teach "if a filter is not required to satisfy said request: creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items, recurrence events, and exceptions," and "structuring said data set of filtered items, recurrence events, and exceptions for display on the computing device, wherein structuring said data set includes expanding said recurrence event from the single database record."

However, applicant respectfully disagrees with the Office Action's remarks that Furukawa teaches "if a filter is not required to satisfy said request: creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items, recurrence events, and exceptions," and "structuring said data set of filtered items, recurrence events, and exceptions for display on the computing device, wherein structuring said data set includes expanding said recurrence event from the single database record." The Office Action equates "filtered items" and "exceptions," as recited in Claims 1 and 13, with "routine conditions" and "exceptional conditions" as recited in Furukawa (see page 3 of the Office Action). With that in mind, the Office Action asserts that Furukawa, at Col. 10, line 41-Col. 11, line 20, teaches "if a filter is not required to satisfy said request: creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items, recurrence events, and exceptions." Applicant fails to find anywhere in Furukawa, let alone the aforementioned section, description of or processing related to a "recurrence event" in accordance with the aforementioned assertion on page 3 of the Office Action. Accordingly, Furukawa fails to teach "if a filter is not required to satisfy said request: creating a data set . . . consisting of filtered items, recurrence events, and exceptions" and "structuring said data set of filtered items, recurrence events, and exceptions for display"

Moreover, the Office Action fails to assert why it would be obvious to a person of ordinary skill in the art to combine Winner and Furukawa. Whether or not Winner and Furukawa are obvious to combine, or even if Winner and Furukawa are properly combined, Winner and Furukawa do not teach, suggest, or describe the foregoing aspects of the invention recited in Claims 1 and 13. Generally described, under 35 U.S.C. § 103(a), a *prima facie* case of obviousness can be established only if the cited references, alone or in combination, teach each and every element recited in the claim. *In re Bell*, 991 F.2d 781 (Fed. Cir. 1993). Winner and Furukawa, alone or in combination, fail to teach or suggest "determining if a filter for identifying items that match a search criteria defined by the user is required to satisfy said request, wherein said recurrence event is represented in a database in a single database record," "if a filter is not required to satisfy said request: creating a data set that is stored in the memory of the computing device related to said recurrence event consisting of filtered items, recurrence events, and exceptions," and "structuring said data set of filtered items, recurrence events, and exceptions for display on the computing device, wherein structuring said data set includes expanding said recurrence event from the single database record." Accordingly, applicant respectfully requests withdrawal of the pending rejection under 35 U.S.C. § 103(a) with regard to Claims 1 and 13, and the allowance of Claims 1 and 13.

Claims 2-10 and 14-22

Claims 2-10 depend on independent Claim 1. Similarly, Claims 14-22 depend on independent Claim 13. As discussed above, Winner and Furukawa, alone or in combination, fail to teach all of the elements of independent Claims 1 and 13. Accordingly, for the above-mentioned reasons, Claims 2-10 and 14-22 are also allowable over Winner in view of Furukawa. Additionally, these claims are not obvious over Winner in view of Furukawa for additional reasons, some of which are discussed in detail below.

Claims 5 and 17

Claims 5 and 17 include the elements of "identifying exceptions that are not included in the exceptions included in the data set of filtered items by applying a set operation on the data set of exceptions and the data set of filtered items." More specifically, as stated in the present application, a set operation on two data sets may identify all exceptions to a recurrence event that exist for a particular time frame. The set difference operation identifies exceptions that were not retrieved from the database because a filter was applied to these exceptions. Applicant is unable to find any reference in either Winner or Furukawa to applying filters to recurrence events. Moreover, applicant is unable to find any reference in either Winner or Furukawa to applying set operations to different data sets in order to identify exceptions that are not included in the data set of filtered items. Since neither the Winner nor Furukawa system performs set operations to identify exceptions that are not included in the data set of filtered items, Winner and Furukawa, alone or in combination, in no way teach the additional elements that are recited in Claims 5 and 17. Thus, applicant asserts that these claims are also allowable for this additional reason.

Claims 8 and 20

Claims 8 and 20 recite the additional elements of "performing a computer-implemented set difference operation between the exceptions and the database of filtered items." The Office Action asserts that the combination of Winner and Furukawa teaches performing a computer-implemented set difference operation between the exceptions and the data set of filtered items, and cites Col. 10, line 58-Col. 11, line 18, of Winner in support of this proposition. The cited portion of Winner discloses using recurrence expressions to define "anti-events." The cited portion of Winner in no way teaches performing a set operation, let alone a set difference operation. Accordingly, Winner and Furukawa, alone or in combination, fail to teach or suggest

the additional element recited in Claims 8 and 20. Thus, applicant asserts that these claims are also allowable for this additional reason.

Claim Rejections Under 35 U.S.C. §103(a): Winner in view of Furukawa and further in view of Barnett

As noted above, the Office Action rejected Claims 11-12 and 23-24 as being obvious over Winner in view of Furukawa and further in view of Barnett. The Office Action asserts that the cited references disclose each of the elements of these claims and that it would have been obvious to a person of ordinary skill in the art to combine the teachings of the cited references at the time the invention was made. Because a dependent claim carries each and every limitation of the claim it depends on, Winner and Furukawa, either alone or in combination, fail to teach or suggest each of the limitations as discussed above. Further, applicant respectfully submits that the additionally cited reference of Barnett fails to teach or suggest the deficiencies associated with Winner and Furukawa. Accordingly, applicant respectfully requests withdrawal of the pending rejection under 35 U.S.C. § 103(a) with regard to Claims 11-12 and 23-24, and the allowance of Claims 11-12 and 23-24.

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